APPENDIX G

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION: SOIL BIN SAMPLES

REPORT

TRUESDAIL LABORATORIES, INC.

CHEMISTS · MICROBIOLOGISTS · ENGINEERS
RESEARCH · DEVELOPMENT · TESTING
ESTABLISHED 1931

14201 FRANKLIN AVENUE
TUSTIN, CALIF. 92680
(714) 730-6239
FAX (714) 730-6462

LA County Dept. of Agricultural Commissioners
3400 La Madera Ave.
El Monte, CA 91732
Attn: Richard Wightman

Date: January 28, 1997
Recv'd: January 14, 1997
Lab. No: 600007
P.O. No: Verbal

Sample: Eight (8) soil samples labelled:

Composite #1

1743	SB-5A	1/7/97
1744	SB-5B	1/7/97
1745	SB-5C	1/7/97
1746	SB-5D	1/7/97

Composite #2

5233	SB-6A	1/9/97
5234	SB-6B	1/9/97
5235	SB-6C	1/9/97
5236	SB-6D	1/9/97

Investigation: Analyze for strychnine in soil by high performance liquid chromatography (HPLC)-ultra violet (UV) spectroscopic detection.

RESULTS

The results are tabulated on the following page.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Joe Bramblett, Manager
Instrumental Methods

Approximately, seven (7) grams of each soil sample was composited to yield approximately 21 grams.

The soil sample composite was extracted with distilled water at pH < 2. The water extract was neutralized to pH 5 and analyzed by HPLC-UV. The HPLC-UV analysis was adapted from NIOSH Method 5016.

Milligrams per Kilogram (ppm)

HPLC-UV	Strychnine	Detection Limit*
Composite #1	ND	0.1
Composite #1, duplicate	ND	0.1
Composite #2	ND	0.1
Composite #2, duplicate	ND	0.1

*-The individual samples have a detection limit of approximately 0.4 mg/kg (ppm).
ND-Not detected.

Laboratory Control Spike

Milligrams per Kilogram (ppm)

HPLC-UV	Amount Spiked	Amount Found	Percent Recovered
Strychnine	6.64	4.24	64.0

Treschle

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS Engineers	CARRIER:	TURNAROUND TIME REQUIRED: ☒ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION	
STREET: 3711 Long Beach Blvd, 9th Floor	SHIPMENT DATE:		
CITY: Long Beach STATE: CA ZIP: 90807	SHIPPING NUMBER:		
PHONE: (562) 426-9171 FAX: (562) 427-0505	NUMBER OF SAMPLES: 8	PAGE 1 OF 1	
PROJECT NAME: LACDA	QUOTE #/P.O. #		
PROJECT ADDRESS: 3841 East Slauson Ave, Pico Rivera, CA			
PROJECT NUMBER: 01931-01-01	TASK NUMBER:		
SAMPLER NAME AND SIGNATURE: Steve Clements			
CONTACT PERSON REPORTS TO BE SENT TO: Steve Clements			

SAMPLE I.D NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE/TYPE	DATE/TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: Strychnine	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1793	SB-1A	Soil		4 oz. Glass Jar	1-7-97				Composite	X	
1794	SB-1B										
1795	SB-1C										
1796	SB-1D										
5233	SB-6A	Soil		4 oz. Glass Jar	1-9-97				Composite	X X	
5234	SB-6B										
5235	SB-6C										
5236	SB-6D										

SPECIAL INSTRUCTIONS / COMMENTS:

Note: Please archive unused composite for later analysis.

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	DATE:	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	DATE:
COMPANY: SCS	TIME: 11 noon	COMPANY:	TIME:	COMPANY:	TIME:	COMPANY:	TIME:

Quanterra Incorporated
1721 South Grand Avenue
Santa Ana, California 92705

714 258-8610 Telephone
714 258-0921 Fax

Quanterra
Environmental Services

February 11, 1997

SCS ENGINEERS
3711 LONG BEACH BLVD, NINTH FLOOR
LONG BEACH, CA 90807
ATTN: MR. STEVE CLEMENTS

LIMS NO.: 124004-0001/0002
DATE SAMPLED: 7/9-JAN-1997
DATE SAMPLE REC'D: 10-JAN-1997
PROJECT: LACDAC/0193171.01

Enclosed with this letter is the report containing the analytical results for the project specified above.

The Narrative section included in the following attachment provides a detailed description of all events that occurred during sample processing, analysis, and data review as applicable to the samples and analytical methods requested.

Report data sheets contain a list of the requested constituents measured in each test, the analytical results, and the standard reporting limits (RLs). Reporting limits are adjusted to reflect any dilution or dry weight correction, when applicable. Solid and waste matrix samples are reported on an "as received" basis for this report. Also provided in this report are the LIMS Report Key and the terms and abbreviations commonly used in our reports.

Preliminary data for SW8080 were provided on January 20, 1997 at 4:00 P.M and at 5:40 P.M. to Steve Clements.

The report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding the data provided in this report, please call Sabina Sudoko at (714) 258-8610. Release of this report has been authorized by the Lab Director or the designee as demonstrated by the following signature.

Sincerely,

Sabina Sudoko
Project Manager

cc: Project File

Quanterra Environmental Services

Section	Description
Cover letter	Signature page, report narrative as applicable.
Sample Description Information	Tabulated cross-reference between the Lab ID and Client ID, including matrix, date and time sampled and the date received for all samples in the project.
Sample Analysis Results Sheets	Lists sample results, test components, reporting limits, dates prepared and analyzed and any data qualifiers. Pages are organized by test.
QC Lot Assignment Report	Cross-reference between lab IDs and applicable QC batches (DCS, LCS, SCS, Blank, MS/SD, DU)
Duplicate Control Sample Report	Percent recovery and RPD results, with acceptance limits, for the laboratory Duplicate Control Samples for each test are tabulated in this report. These are measures of accuracy and precision for each test.
Laboratory Control Sample Report	Percent recovery results for a single Laboratory Control Sample (if applicable) are tabulated in this report, with the applicable acceptance limits for each test.
Matrix Spike/Matrix Spike Duplicate Report	Percent recovery and RPD results for matrix-specific QC samples and acceptance limits, where applicable. This report can be used to assess matrix effects on an analysis.
Single Control Sample Report	A tabulation of the surrogate recoveries for the blank for organic analyses.
Method Blank Report	A summary of the results of the analysis of the method blank for each test.

List of Abbreviations and Terms

DCS	Duplicate Control Sample	MSD	Matrix Spike Duplicate
DU	Sample Duplicate	QC Run	Preparation batch
EB	Equipment Blank	QC Category	LIMS QC Category
FB	Field Blank	QC Lot	DCS batch
FD	Field Duplicate	ND	Not Detected at the reporting limit expressed
IDL	Instrument Detection Limit	QC Matrix	Matrix of the laboratory control sample (s)
LCS	Laboratory Control Sample	RL	Reporting Limit
MB	Method Blank	QC	Quality Control
MDL	Method Detection Limit	SA	Sample
MS	Matrix Spike	SD	See MSD
RPD	Relative Percent Difference	TB	Trip Blank
ppm (parts-per-million)	mg/L or mg/kg	ppb (parts-per-billion)	µg/L or µg/kg
QUAL	Qualifier flag	DIL	Dilution Factor

Refer to the Quanterra Incorporated Quality Assurance Management Plan for detailed explanations of terms summarized above.

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Environmental Services

TABLE OF CONTENTS

LIMS # 124004

CASE NARRATIVE

LIMS # 124004

I. CONDITION UPON RECEIPT

Cooler was received intact. The temperature of the cooler was 4.7°C.

Sample containers were received intact. Proper preservation of applicable samples (excluding VOA samples) was verified upon receipt and documented on the Sample Control worksheet. Sample container label did agree with the COC as to sample ID, collection date/time, requested tests and/or preservatives.

Samples were received in time to meet the method holding time specifications.

II. ORGANIC ANALYSES (BY METHOD: SW8080)

HOLDING TIME
All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK
All method blanks met method- and/or project-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs
All spike recovery and RPD data met method- and/or project-specific QC criteria.

SURROGATE RECOVERIES
All surrogate spike recoveries in samples and in QC samples met method- and/or project-specific QC criteria.

CALIBRATIONS
All calibrations and calibration verifications met method- and/or project-specific QC criteria.

III. METALS (BY METHOD: SW6010A,SW7471)

HOLDING TIME
All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK
All method blank data met method-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs
All spike recovery and RPD data met method-specific QC criteria.

Matrix spike/matrix spike duplicate spke recoveries were outside the acceptance limits for mercury (SW7471). However, the acceptable LCS analysis data indicated that the analytical system was operating within control and this conditionis most likely due to matrix interference.

CALIBRATIONS
All calibrations and calibration verifications met method-specific QC criteria.

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SAMPLE DESCRIPTION INFORMATION
for
SCS Engineers

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
124004-0001-SA	COMPOSITE OF 1739/1742 (SB-5A,	SOIL	07 JAN 97		10 JAN 97
124004-0002-SA	COMPOSITE OF 5229/5232 (SB-6A,	SOIL	09 JAN 97		10 JAN 97

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name:	SCS Engineers		
Client ID:	COMPOSITE OF 1739/1742 (SB-5A,B,C,D)		
LAB ID:	124004-0001-SA		
Matrix:	SOIL	Sampled: 07 JAN 97	Received: 10 JAN 97
Authorized:	10 JAN 97	Prepared: 13 JAN 97	Analyzed: 16 JAN 97
Instrument:	GC/ECD-PTA	Dilution: 1.0	

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	ND		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	3.7		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	ND		1.7	ug/kg
gamma-Chlordane	ND		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range
2,4,5,6-Tetrachloro-m-xylene	92	%	60 - 150
Decachlorobiphenyl	126	%	60 - 150

ND = Not Detected

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name:	SCS Engineers		
Client ID:	COMPOSITE OF 5229/5232 (SB-6A,B,C,D)		
LAB ID:	124004-0002-SA		
Matrix:	SOIL	Sampled: 09 JAN 97	Received: 10 JAN 97
Authorized:	10 JAN 97	Prepared: 13 JAN 97	Analyzed: 16 JAN 97
Instrument:	GC/ECD-PTA	Dilution: 1.0	

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	ND		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	ND		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	ND		1.7	ug/kg
gamma-Chlordane	ND		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range
2,4,5,6-Tetrachloro-m-xylene	93	%	60 - 150
Decachlorobiphenyl	113	%	60 - 150

ND = Not Detected

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Environmental Services

METALS

Client Name: SCS Engineers
Client ID: COMPOSITE OF 1739/1742 (SB-5A,B,C,D)
LAB ID: 124004-0001-SA
Matrix: SOIL
Authorized: 10 JAN 97

Sampled: 07 JAN 97
Prepared: See Below

Received: 10 JAN 97
Analyzed: See Below

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyzed Date
Mercury	ND		1.0	0.040	mg/kg	SW7471	20 JAN 97	20 JAN
Arsenic	ND		1.0	10.0	mg/kg	6010A	14 JAN 97	16 JAN
Cadmium	ND		1.0	0.50	mg/kg	6010A	14 JAN 97	16 JAN
Copper	10.4		1.0	2.0	mg/kg	6010A	14 JAN 97	16 JAN
Lead	10.6		1.0	10.0	mg/kg	6010A	14 JAN 97	16 JAN
Thallium	ND		1.0	50.0	mg/kg	6010A	14 JAN 97	16 JAN
Zinc	38.5		1.0	2.0	mg/kg	6010A	14 JAN 97	16 JAN

ND = Not Detected

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METALS

Client Name: SCS Engineers
Client ID: COMPOSITE OF 5229/5232 (SB-6A,B,C,D)
LAB ID: 124004-0002-SA
Matrix: SOIL
Authorized: 10 JAN 97

Sampled: 09 JAN 97
Prepared: See Below

Received: 10 JAN 97
Analyzed: See Below

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyzed Date
Mercury	0.049		1.0	0.040	mg/kg	SW7471	20 JAN 97	20 JAN 9
Arsenic	ND		1.0	10.0	mg/kg	6010A	14 JAN 97	16 JAN 9
Cadmium	ND		1.0	0.50	mg/kg	6010A	14 JAN 97	16 JAN 9
Copper	14.0		1.0	2.0	mg/kg	6010A	14 JAN 97	16 JAN 9
Lead	15.8		1.0	10.0	mg/kg	6010A	14 JAN 97	16 JAN 9
Thallium	ND		1.0	50.0	mg/kg	6010A	14 JAN 97	16 JAN 9
Zinc	54.3		1.0	2.0	mg/kg	6010A	14 JAN 97	16 JAN 9

ND = Not Detected

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QC LOT ASSIGNMENT REPORT - MS QC
Semivolatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Number (SA,MS,SD,DU)
124004-0001-SA	SOLID	8080-S		13 JAN 97-AX	13 JAN 97-AA
124004-0002-SA	SOLID	8080-S		13 JAN 97-AX	13 JAN 97-AA

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Environmental Services

LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 124004

Category: 8080-S Pesticides
Matrix: SOLID
QC Run: 13 JAN 97-AX
Concentration Units: ug/kg

Date Analyzed: 14 JAN 97

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
gamma-BHC (Lindane)	33.3	31.5	95	25-166
Heptachlor	33.3	31.1	93	37-132
Aldrin	33.3	32.3	97	40-126
Dieldrin	33.3	33.2	100	50-126
Endrin	33.3	36.2	109	35-126
4,4'-DDT	33.3	31.7	95	42-113

Calculations are performed before rounding to avoid round-off errors in calculated results.

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Environmental Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Semivolatile Organics by GC
Project: 124004

Category: 8080-S Pesticides
Matrix: SOLID
Sample: 124013-0001
MS Run: 13 JAN 97-AA
Units ug/kg Units Qualifier: Wet weight

Analyte	Sample Result	Concentration MS Result	Concentration MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	Acceptance Limit RP
gamma-BHC (Lindane)	ND	27.7	28.8	33.3	83	87	3.8	12-164	2
Heptachlor	ND	27.5	28.6	33.3	83	86	3.7	26-131	2
Aldrin	ND	28.1	29.1	33.3	84	87	3.6	28-130	2
Dieldrin	ND	28.4	29.5	33.3	85	88	3.6	38-132	2
Endrin	ND	32.0	33.3	33.3	96	100	3.9	44-135	2
4,4'-DDT	ND	27.3	28.4	33.3	82	85	3.8	20-135	3

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

SINGLE CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 124004

Category: 8080-S Pesticides
Matrix: SOLID
QC Run: 13 JAN 97-AX
Date Analyzed: 14 JAN 97
Concentration Units: ug/kg

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) SCS	Accuracy(%) Limits
2,4,5,6-Tetrachloro-m-xylene	6.67	6.93	104	60-150
Decachlorobiphenyl	6.67	9.26	139	60-150

Calculations are performed before rounding to avoid round-off errors in calculated results.

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Environmental Services

METHOD BLANK REPORT
Semivolatile Organics by GC
Project: 124004

Test: 8080-S
Matrix: SOLID
QC Run: 13 JAN 97-AX

Method 8080 - TCL Organochlorine Pesticides/PCBs

Date Analyzed: 14 JAN 97

Analyte	Result	Units	Reporting Limit
alpha-BHC	ND	ug/kg	1.7
beta-BHC	ND	ug/kg	1.7
delta-BHC	ND	ug/kg	1.7
gamma-BHC (Lindane)	ND	ug/kg	1.7
Aldrin	ND	ug/kg	1.7
Heptachlor	ND	ug/kg	1.7
Heptachlor epoxide	ND	ug/kg	1.7
Endosulfan I	ND	ug/kg	1.7
Dieldrin	ND	ug/kg	3.3
4,4'-DDE	ND	ug/kg	3.3
Endrin	ND	ug/kg	3.3
Endosulfan II	ND	ug/kg	3.3
4,4'-DDD	ND	ug/kg	3.3
Endosulfan sulfate	ND	ug/kg	3.3
4,4'-DDT	ND	ug/kg	3.3
Methoxychlor	ND	ug/kg	14
Endrin aldehyde	ND	ug/kg	3.3
alpha-Chlordane	ND	ug/kg	1.7
gamma-Chlordane	ND	ug/kg	1.7
Toxaphene	ND	ug/kg	70

ND = Not Detected

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QC LOT ASSIGNMENT REPORT - MS QC
Metals Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Number (SA,MS,SD,DU)
124004-0001-SA	SOLID	HG-CVAA-S		20 JAN 97-HX	20 JAN 97-HA
124004-0001-SA	SOLID	ICP-S		14 JAN 97-RX	14 JAN 97-RA
124004-0002-SA	SOLID	HG-CVAA-S		20 JAN 97-HX	20 JAN 97-HA
124004-0002-SA	SOLID	ICP-S		14 JAN 97-RX	14 JAN 97-RA

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LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation
Project: 124004

Category: HG-CVAA-S Mercury by CVAA
Matrix: SOLID
QC Run: 20 JAN 97-HX
Concentration Units: mg/kg

Date Analyzed: 20 JAN 97

Analyte	Concentration Spiked	Measured	Accuracy(%) LCS	Limits
Mercury	0.833	0.838	101	80-120

Category: ICP-S ICP Metals
Matrix: SOLID
QC Run: 14 JAN 97-RX
Concentration Units: mg/kg

Date Analyzed: 16 JAN 97

Analyte	Concentration Spiked	Measured	Accuracy(%) LCS	Limits
Arsenic	200	203	101	75-110
Cadmium	5.00	4.57	91	80-115
Copper	25.0	25.2	101	85-115
Lead	50.0	44.4	89	80-110
Thallium	200	194	97	80-110
Zinc	50.0	48.3	97	80-115

Calculations are performed before rounding to avoid round-off errors in calculated results.

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Environmental Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Metals Analysis and Preparation
Project: 124004

Category: HG-CVAA-S Mercury by CVAA
Matrix: SOLID
Sample: 124004-0001
MS Run: 20 JAN 97-HA
Units mg/kg Units Qualifier: Wet wt.

Analyte	Sample Result	MS Result		MSD Result		Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	Acceptance Limit RP
Mercury	ND	0.208	n	0.207	n	0.167	125	124	0.4	80-120	2

Category: ICP-S ICP Metals
Matrix: SOLID
Sample: 124004-0001
MS Run: 14 JAN 97-RA
Units: mg/kg

Analyte	Sample Result	MS Result	MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	Acceptance Limit RP
Arsenic	ND	216	218	200	108	109	0.9	75-110	2
Cadmium	ND	4.41	4.87	5.00	88	97	9.9	80-115	2
Copper	10.4	34.9	35.4	25.0	98	100	1.2	85-115	2
Lead	10.6	54.7	56.7	50.0	88	92	3.5	80-110	2
Thallium	ND	215	216	200	108	108	0.3	80-110	2
Zinc	38.5	88.5	90.3	50.0	100	103	2.0	80-115	2

n = Spiked analyte out of matrix spike acceptance limits; refer to lab control sample results.
ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

METHOD BLANK REPORT
Metals Analysis and Preparation
Project: 124004

Test: HG-CVAA-S Method 7471 - Mercury, Cold Vapor AA
Matrix: SOLID
QC Run: 20 JAN 97-HX Date Analyzed: 20 JAN 9

Analyte	Result	Units	Reporting Limit
Mercury	ND	mg/kg	0.040

Test: ICP-S Method 6010 - ICP Metals (Total)
Matrix: SOLID
QC Run: 14 JAN 97-RX Date Analyzed: 16 JAN 97

Analyte	Result	Units	Reporting Limit
Arsenic	ND	mg/kg	10.0
Cadmium	ND	mg/kg	0.50
Copper	ND	mg/kg	2.0
Lead	ND	mg/kg	10.0
Thallium	ND	mg/kg	50.0
Zinc	ND	mg/kg	2.0

ND = Not Detected

Quanterra

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

124004

COMPANY NAME: SCS Engineers
STREET: 3711 Long Beach Blvd. 9th Floor
CITY: Long Beach STATE: CA ZIP: 90807
PHONE: (310) 426-9544 FAX: (310) 427-0305
PROJECT NAME: LACDAC
PROJECT ADDRESS: 8341 E. Slauson Ave, Pico Rivera, CA
PROJECT NUMBER: 01931701
SAMPLER NAME AND SIGNATURE: Steve Clements
CONTACT PERSON REPORTS TO BE SENT TO: Steve Clements

CARRIER:
SHIPMENT DATE:
SHIPPING NUMBER:
NUMBER OF SAMPLES: 8
PAGE 1 OF 1
QUOTE #/P.O. #
TASK NUMBER:

TURNAROUND TIME REQUIRED:
- [x] NORMAL
- [ ] 5-DAY
- [ ] 3 DAY
- [ ] 24-HOUR
- [ ] IMMEDIATE ATTENTION

SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE/TYPE	DATE/TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: EPA 8080 *	ANALYSES REQUIRED: Metals **	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1739	SB-5A	Soil		402 (glass) Jar	1-7-97							
1740	SB-5B											
1741	SB-5C											
1742	SB-5D								Composite	X	X	-0001
~~1743~~												
5229	SB-6A	Soil		402 (glass) Jar	1-9-97							
5230	SB-6B											
5231	SB-6C											
5232	SB-6D								Composite	X	X	-0002

SPECIAL INSTRUCTIONS / COMMENTS: * = No PCBs

** = Metals ⇒ As, Cd, Cu, Pb, Hg, Tl, Zn.

Note: Please Archive Unused Composite for later analysis.

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE:	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	DATE
COMPANY: SCS	TIME: 9:50 am	COMPANY: Courier	TIME: 9:50	COMPANY: Courier	TIME: 10:45	COMPANY:	TIME: 1045

TRUESDAIL LABORATORIES, INC.

CHEMISTS · MICROBIOLOGISTS · ENGINEERS
RESEARCH · DEVELOPMENT · TESTING
ESTABLISHED 1931

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780
(714) 730-6239
FAX (714) 730-6462

LA County Dept. of Agricultural Commissioners
3400 La Madera Ave.
El Monte, CA 91732
Attn: Richard Wightman

Date: September 22, 1996
Recv'd: September 6, 1996
Lab. No: 90598
P.O. No: Verbal

Sample: Sixteen (16) soil samples labelled:

Composite #1		
8717	SB-1 A	9/4/96
8718	SB-1 B	9/4/96
8719	SB-1 C	9/4/96
8720	SB-1 D	9/4/96
Composite #2		
8721	SB-2 A	9/4/96
8722	SB-2 B	9/4/96
8723	SB-2 C	9/4/96
8724	SB-2 D	9/4/96
Composite #3		
8725	SB-3 A	9/4/96
8726	SB-3 B	9/4/96
8727	SB-3 C	9/4/96
8728	SB-3 D	9/4/96
Composite #4		
8729	SB-4 A	9/4/96
8730	SB-4 B	9/4/96
8731	SB-4 C	9/4/96
8732	SB-4 D	9/4/96

Investigation: Analyze for strychnine in soil by high performance liquid chromatography (HPLC)-ultra violet (UV) spectroscopic detection.

RESULTS

The results are tabulated on the following page.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Joe Bramblett, Manager
Instrumental Methods

Approximately, seven (7) grams of each soil sample was composited into for separate composites (approximately, 21 grams each) labelled #1, #2, #3, and #4.

Each soil sample composite was extracted with distilled water at pH < 2. The water extract was neutralized to pH 7 and extracted with diethylether. The ether extract was exchanged into acetonitrile for analysis by HPLC-UV. The HPLC-UV analysis was adapted from NIOSH Method 5016.

Milligrams per Kilogram (ppm)

HPLC-UV	Strychnine	Detection Limit*
Composite #1	ND	0.1
Composite #2	ND	0.1
Composite #3	ND	0.1
Composite #4	ND	0.1

*-The individual samples have a detection limit of approximately 0.4 mg/kg (ppm).

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

SCS ANALYTICAL LABORATORY

COMPANY NAME: SCS Engineers	CARRIER:
ADDRESS: 3711 Long Beach Blvd, 7th Fl, Long Beach, CA 90807	SHIPMENT DATE:
PHONE NUMBER: (310) 426-9544	SHIPPING NUMBER:
FAX: (310) 427-0805	NUMBER OF SAMPLES: 16 PAGE 1 OF 2

TURNAROUND TIME REQUIRED:
- ☒ NORMAL
- ☐ 5-DAY ☐ 3-DAY
- ☐ 24-HOUR
- ☐ IMMEDIATE ATTENTION

PROJECT NAME: LA DAC
PROJECT ADDRESS: 5541 E Slauson Ave, Pico Rivera, CA
PROJECT NUMBER: 01937.01
SAMPLER NAME AND SIGNATURE: Steve Clemmer
REPORTS TO BE SENT TO: Ron Lister

SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: Strychnine	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
8717	SB-1(A)	Soil	4/4	4oz Glass Jar	9/4/96				Composite		
8718	SB-1(B)									X	
8719	SB-1(C)										
8720	SB-1(D)										
8721	SB-2(A)										
8722	SB-2(B)								Composite	X	
8723	SB-2(C)										
8724	SB-2(D)										
[redacted]											
[redacted]											

SPECIAL INSTRUCTIONS / COMMENTS:

Please Archive soil composite for later analysis.

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
COMPANY: SCS	TIME: 850	COMPANY:	COMPANY:	TIME:	COMPANY:

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

SCS ANALYTICAL LABORATORY

COMPANY NAME: SCS Engineers	CARRIER:	TURNAROUND TIME REQUIRED:
ADDRESS: 3711 Long Beach Blvd, 7th Fl, Long Beach, CA 90807	SHIPMENT DATE:	[X] NORMAL
PHONE NUMBER: (310) 426-9544	SHIPPING NUMBER:	[ ] 5-DAY [ ] 3-DAY
FAX: (310) 427-0805	NUMBER OF SAMPLES: 16 PAGE 2 OF 2	[ ] 24-HOUR
		[ ] IMMEDIATE ATTENTION

PROJECT NAME: LA DAC

PROJECT ADDRESS: [redacted] 3741 E. Slauson Ave, Pico Rivera, CA

PROJECT NUMBER: 01131171.01

SAMPLER NAME AND SIGNATURE: Steve Clements

REPORTS TO BE SENT TO: Ron Lister

SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: Stycnine	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
8725	SB-3(A)	Soil	N/A	4 oz Glass Jar	9/4/96						
8726	SB-3(B)								composite ⇒	X	
8727	SB-3(C)										
8728	SB-3(D)										
8729	SB-4(A)										
8730	SB-4(B)								composite ⇒	X	
8731	SB-4(C)										
8732	SB-4(D)										

SPECIAL INSTRUCTIONS / COMMENTS:

Please Archive Soil samples for later analysis.

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
COMPANY: SCS	TIME: 8500	COMPANY: T.A.L.	COMPANY:	TIME:	COMPANY:

Quanterra Incorporated
1721 South Grand Avenue
Santa Ana, California 92705

714 258-8610 Telephone
714 258-0921 Fax

Quanterra
Environmental Services

September 26, 1996

SCS ENGINEERS
3711 LONG BEACH BLVD, NINTH FLOOR
LONG BEACH, CA 90807
ATTN: MR. STEVE CLEMENTS

LIMS NO.: 121083-0001/0004
DATE SAMPLED: 4-SEP-1996
DATE SAMPLE REC'D: 5-SEP-1996
PROJECT: LACDAC/0193171.01

Enclosed with this letter is the report containing the analytical results for the project specified above.

The Narrative section included in the following attachment provides a detailed description of all events that occurred during sample processing, analysis, and data review as applicable to the samples and analytical methods requested.

Report data sheets contain a list of the requested constituents measured in each test, the analytical results, and the standard reporting limits (RLs). Reporting limits are adjusted to reflect any dilution or dry weight correction, when applicable. Solid and waste matrix samples are reported on [a dry weight/ an "as received"] basis for this report. Also provided in this report are the LIMS Report Key and the terms and abbreviations commonly used in our reports.

Preliminary data were provided on September 26, 1996 at 5:30 P.M. to Steve Clements.

The report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding the data provided in this report, please call Sabina Sudoko at (714) 258-8610. Release of this report has been authorized by the Lab Director or the designee as demonstrated by the following signature.

Sincerely,

Sabina K. Sudoko
Project Manager

cc: Project File

LIMS REPORT KEY

Quanterra Environmental Services

Section	Description
Cover letter	Signature page, report narrative as applicable.
Sample Description Information	Tabulated cross-reference between the Lab ID and Client ID, including matrix, date and time sampled and the date received for all samples in the project.
Sample Analysis Results Sheets	Lists sample results, test components, reporting limits, dates prepared and analyzed and any data qualifiers. Pages are organized by test.
QC Lot Assignment Report	Cross-reference between lab IDs and applicable QC batches (DCS, LCS, SCS, Blank, MS/SD, DU)
Duplicate Control Sample Report	Percent recovery and RPD results, with acceptance limits, for the laboratory Duplicate Control Samples for each test are tabulated in this report. These are measures of accuracy and precision for each test.
Laboratory Control Sample Report	Percent recovery results for a single Laboratory Control Sample (if applicable) are tabulated in this report, with the applicable acceptance limits for each test.
Matrix Spike/Matrix Spike Duplicate Report	Percent recovery and RPD results for matrix-specific QC samples and acceptance limits, where applicable. This report can be used to assess matrix effects on an analysis.
Single Control Sample Report	A tabulation of the surrogate recoveries for the blank for organic analyses.
Method Blank Report	A summary of the results of the analysis of the method blank for each test.

List of Abbreviations and Terms

DCS	Duplicate Control Sample	MSD	Matrix Spike Duplicate
DU	Sample Duplicate	QC Run	Preparation batch
EB	Equipment Blank	QC Category	LIMS QC Category
FB	Field Blank	QC Lot	DCS batch
FD	Field Duplicate	ND	Not Detected at the reporting limit expressed
IDL	Instrument Detection Limit	QC Matrix	Matrix of the laboratory control sample (s)
LCS	Laboratory Control Sample	RL	Reporting Limit
MB	Method Blank	QC	Quality Control
MDL	Method Detection Limit	SA	Sample
MS	Matrix Spike	SD	See MSD
RPD	Relative Percent Difference	TB	Trip Blank
ppm (parts-per-million)	mg/L or mg/kg	ppb (parts-per-billion)	µg/L or µg/kg
QUAL	Qualifier flag	DIL	Dilution Factor

Refer to the Quanterra Incorporated Quality Assurance Management Plan for detailed explanations of terms summarized above.

Quanterra
Environmental
Services

TABLE OF CONTENTS

LIMS # 121083

Quanterra Environmental Services

CASE NARRATIVE

LIMS # 121083

I. CONDITION UPON RECEIPT

Cooler was received intact. The temperature of the cooler was 5.1 °C.

Sample containers were received intact. Proper preservation of applicable samples (excluding VOA samples) was verified upon receipt and documented on the Sample Control worksheet. Sample container label did agree with the COC as to sample ID, collection date/time, requested tests and/or preservatives.

Samples were received in time to meet the method holding time specifications.

II. ORGANIC ANALYSES (BY METHOD: SW8080)

HOLDING TIME
All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK
All method blanks met method-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs
All spike recovery and RPD data met method-specific QC criteria.

SURROGATE RECOVERIES
All surrogate spike recoveries in samples and in QC samples met method-specific QC criteria.

CALIBRATIONS
All calibrations and calibration verifications met method-specific QC criteria.

III. METALS (BY METHOD: SW6010; SW7000 Series)

HOLDING TIME
All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK
All method blank data met method-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs
All spike recovery and RPD data met method-specific QC criteria.

CALIBRATIONS
All calibrations and calibration verifications met method-specific QC criteria.

Quanterra
Environmental Services

SAMPLE DESCRIPTION INFORMATION
for
SCS Engineers

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
121083-0001-SA	COMPOSITE SB-1(A-D)	SOIL	04 SEP 96		05 SEP 96
121083-0002-SA	COMPOSITE SB-2(A-D)	SOIL	04 SEP 96		05 SEP 96
121083-0003-SA	COMPOSITE SB-3(A-D)	SOIL	04 SEP 96		05 SEP 96
121083-0004-SA	COMPOSITE SB-4(A-D)	SOIL	04 SEP 96		05 SEP 96

Quanterra Environmental Services

METALS

Client Name: SCS Engineers
Client ID: COMPOSITE SB-1(A-D)
LAB ID: 121083-0001-SA
Matrix: SOIL
Authorized: 06 SEP 96

Sampled: 04 SEP 96
Prepared: See Below

Received: 05 SEP 96
Analyzed: See Below

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyzed Date
Mercury	0.057		1.0	0.040	mg/kg	SW7471	13 SEP 96	16 SEP
Arsenic	ND		1.0	10.0	mg/kg	6010A	23 SEP 96	24 SEP
Cadmium	0.64		1.0	0.50	mg/kg	6010A	23 SEP 96	24 SEP
Copper	17.0		1.0	2.0	mg/kg	6010A	23 SEP 96	24 SEP
Lead	50.2		1.0	10.0	mg/kg	6010A	23 SEP 96	24 SEP
Thallium	ND		1.0	50.0	mg/kg	6010A	23 SEP 96	24 SEP
Zinc	107		1.0	2.0	mg/kg	6010A	23 SEP 96	24 SEP

ND = Not Detected

Quanterra
Environmental Services

METALS

Client Name: SCS Engineers
Client ID: COMPOSITE SB-2(A-D)
LAB ID: 121083-0002-SA
Matrix: SOIL
Authorized: 06 SEP 96

Sampled: 04 SEP 96
Prepared: See Below

Received: 05 SEP 9
Analyzed: See Belc

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyze Date
Mercury	0.061		1.0	0.040	mg/kg	SW7471	13 SEP 96	16 SEP
Arsenic	ND		1.0	10.0	mg/kg	6010A	23 SEP 96	24 SEP
Cadmium	0.52		1.0	0.50	mg/kg	6010A	23 SEP 96	24 SEP
Copper	13.4		1.0	2.0	mg/kg	6010A	23 SEP 96	24 SEP
Lead	17.2		1.0	10.0	mg/kg	6010A	23 SEP 96	24 SEP
Thallium	ND		1.0	50.0	mg/kg	6010A	23 SEP 96	24 SEP
Zinc	43.8		1.0	2.0	mg/kg	6010A	23 SEP 96	24 SEP

ND = Not Detected

Quanterra
Environmental Services

METALS

Client Name: SCS Engineers
Client ID: COMPOSITE SB-3(A-D)
LAB ID: 121083-0003-SA
Matrix: SOIL
Authorized: 06 SEP 96

Sampled: 04 SEP 96
Prepared: See Below

Received: 05 SEP 96
Analyzed: See Below

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyzed Date
Mercury	ND		1.0	0.040	mg/kg	SW7471	13 SEP 96	16 SEP
Arsenic	ND		1.0	10.0	mg/kg	6010A	23 SEP 96	24 SEP
Cadmium	ND		1.0	0.50	mg/kg	6010A	23 SEP 96	24 SEP
Copper	12.1		1.0	2.0	mg/kg	6010A	23 SEP 96	24 SEP
Lead	21.5		1.0	10.0	mg/kg	6010A	23 SEP 96	24 SEP
Thallium	ND		1.0	50.0	mg/kg	6010A	23 SEP 96	24 SEP
Zinc	45.9		1.0	2.0	mg/kg	6010A	23 SEP 96	24 SEP

ND = Not Detected

Quanterra
Environmental Services

METALS

Client Name: SCS Engineers
Client ID: COMPOSITE SB-4(A-D)
LAB ID: 121083-0004-SA
Matrix: SOIL — Sampled: 04 SEP 96 — Received: 05 SEP 9
Authorized: 06 SEP 96 — Prepared: See Below — Analyzed: See Belo

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyze Date
Mercury	0.045		1.0	0.040	mg/kg	SW7471	13 SEP 96	16 SEP
Arsenic	ND		1.0	10.0	mg/kg	6010A	23 SEP 96	25 SEP
Cadmium	ND		1.0	0.50	mg/kg	6010A	23 SEP 96	25 SEP
Copper	14.1		1.0	2.0	mg/kg	6010A	23 SEP 96	25 SEP
Lead	30.1		1.0	10.0	mg/kg	6010A	23 SEP 96	25 SEP
Thallium	ND		1.0	50.0	mg/kg	6010A	23 SEP 96	25 SEP
Zinc	52.3		1.0	2.0	mg/kg	6010A	23 SEP 96	25 SEP

ND = Not Detected

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name:	SCS Engineers		
Client ID:	COMPOSITE SB-1(A-D)		
LAB ID:	121083-0001-SA		
Matrix:	SOIL	Sampled: 04 SEP 96	Received: 05 SEP 96
Authorized:	06 SEP 96	Prepared: 09 SEP 96	Analyzed: 13 SEP 96
Instrument:	GC/ECD-PVB	Dilution: 1.0	

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	ND		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	ND		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	ND		1.7	ug/kg
gamma-Chlordane	ND		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range
2,4,5,6-Tetrachloro-m-xylene	114	%	60 - 150
Decachlorobiphenyl	103	%	60 - 150

ND = Not Detected

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name:	SCS Engineers		
Client ID:	COMPOSITE SB-2(A-D)		
LAB ID:	121083-0002-SA		
Matrix:	SOIL	Sampled: 04 SEP 96	Received: 05 SEP 96
Authorized:	06 SEP 96	Prepared: 09 SEP 96	Analyzed: 13 SEP 96
Instrument:	GC/ECD-PVB	Dilution: 1.0	

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	ND		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	ND		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	ND		1.7	ug/kg
gamma-Chlordane	ND		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range
2,4,5,6-Tetrachloro-m-xylene	123	%	60 - 150
Decachlorobiphenyl	113	%	60 - 150

ND = Not Detected

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name:	SCS Engineers		
Client ID:	COMPOSITE SB-3(A-D)		
LAB ID:	121083-0003-SA		
Matrix:	SOIL	Sampled: 04 SEP 96	Received: 05 SEP 96
Authorized:	06 SEP 96	Prepared: 09 SEP 96	Analyzed: 13 SEP 96
Instrument:	GC/ECD-PVB	Dilution: 1.0	

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	ND		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	6.0		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	ND		1.7	ug/kg
gamma-Chlordane	ND		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range
2,4,5,6-Tetrachloro-m-xylene	113	%	60 - 150
Decachlorobiphenyl	102	%	60 - 150

ND = Not Detected

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name: SCS Engineers
Client ID: COMPOSITE SB-4(A-D)
LAB ID: 121083-0004-SA
Matrix: SOIL Sampled: 04 SEP 96 Received: 05 SEP 96
Authorized: 06 SEP 96 Prepared: 09 SEP 96 Analyzed: 13 SEP 96
Instrument: GC/ECD-PVB Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	ND		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	ND		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	ND		1.7	ug/kg
gamma-Chlordane	ND		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range
2,4,5,6-Tetrachloro-m-xylene	120	%	60 - 150
Decachlorobiphenyl	105	%	60 - 150

ND = Not Detected

Quanterra
Environmental Services

QC LOT ASSIGNMENT REPORT - MS QC
Metals Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Numbe (SA,MS,SD,DU)
121083-0001-SA	SOLID	HG-CVAA-S		13 SEP 96-IX	13 SEP 96-IA
121083-0001-SA	SOLID	ICP-S		23 SEP 96-HX	23 SEP 96-HA
121083-0002-SA	SOLID	HG-CVAA-S		13 SEP 96-IX	13 SEP 96-IA
121083-0002-SA	SOLID	ICP-S		23 SEP 96-HX	23 SEP 96-HA
121083-0003-SA	SOLID	HG-CVAA-S		13 SEP 96-IX	13 SEP 96-IA
121083-0003-SA	SOLID	ICP-S		23 SEP 96-HX	23 SEP 96-HA
121083-0004-SA	SOLID	HG-CVAA-S		13 SEP 96-IX	13 SEP 96-IA
121083-0004-SA	SOLID	ICP-S		23 SEP 96-HX	23 SEP 96-HA

Quanterra
Environmental Services

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation
Project: 121083

Category: HG-CVAA-S Mercury by CVAA
Matrix: SOLID
QC Run: 13 SEP 96-IX
Concentration Units: mg/kg

Date Analyzed: 16 SEP 96

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
Mercury	0.833	0.835	100	80-120

Category: ICP-S ICP Metals
Matrix: SOLID
QC Run: 23 SEP 96-HX
Concentration Units: mg/kg

Date Analyzed: 24 SEP 96

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
Arsenic	200	198	99	75-110
Beryllium	5.00	4.72	94	80-115
Cadmium	5.00	5.23	105	80-115
Chromium	20.0	20.1	100	85-120
Copper	25.0	23.7	95	85-115
Lead	50.0	47.6	95	80-110
Silver	5.00	5.25	105	80-110
Thallium	200	186	93	80-110
Zinc	50.0	51.8	104	80-115

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Metals Analysis and Preparation
Project: 121083

Category: HG-CVAA-S Mercury by CVAA
Matrix: SOLID
Sample: 121083-0001
MS Run: 13 SEP 96-IA
Units mg/kg Units Qualifier: Wet wt.

Analyte	Concentration Sample Result	MS Result	MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptanc Limit Recov.	R
Mercury	0.0573	0.215	0.210	0.167	94	91	3.2	80-120	

Category: ICP-S ICP Metals
Matrix: SOLID
Sample: 121158-0015
MS Run: 23 SEP 96-HA
Units: mg/kg

Analyte	Concentration Sample Result	MS Result		MSD Result		Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptanc Limit Recov.	R
Arsenic	ND	205		208		200	103	104	1.1	75-110	
Beryllium	0.530	5.50		5.55		5.00	99	100	1.0	80-115	
Cadmium	0.524	5.31		5.80		5.00	96	106	9.7	80-115	
Chromium	15.2	34.3		34.3		20.0	96	95	0.3	85-120	
Copper	105	133	n	124	n	25.0	NC	NC	NC	85-115	
Lead	92.0	147		136		50.0	110	88	22	80-110	
Silver	ND	5.50		5.55	n	5.00	110	111	0.9	80-110	
Thallium	ND	176		181		200	88	90	2.5	80-110	
Zinc	63.8	119		176	n	50.0	110	223	68	80-115	

n = Spiked analyte out of matrix spike acceptance limits; refer to lab control sample results
NC = Not Calculated, calculation not applicable.
ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

METHOD BLANK REPORT
Metals Analysis and Preparation
Project: 121083

Test: HG-CVAA-S Method 7471 - Mercury, Cold Vapor AA
Matrix: SOLID
QC Run: 13 SEP 96-IX Date Analyzed: 16 SEP 96

Analyte	Result	Units	Reporting Limit
Mercury	ND	mg/kg	0.040

Test: ICP-S Method 6010 - ICP Metals (Total)
Matrix: SOLID
QC Run: 23 SEP 96-HX Date Analyzed: 24 SEP 96

Analyte	Result	Units	Reporting Limit
Arsenic	ND	mg/kg	10.0
Cadmium	ND	mg/kg	0.50
Copper	ND	mg/kg	2.0
Lead	ND	mg/kg	10.0
Thallium	ND	mg/kg	50.0
Zinc	ND	mg/kg	2.0

ND = Not Detected

Quanterra
Environmental Services

QC LOT ASSIGNMENT REPORT - MS QC
Semivolatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Numbe (SA,MS,SD,DU)
121083-0001-SA	SOLID	8080-S		09 SEP 96-IX	09 SEP 96-IA
121083-0002-SA	SOLID	8080-S		09 SEP 96-IX	09 SEP 96-IA
121083-0003-SA	SOLID	8080-S		09 SEP 96-IX	09 SEP 96-IA
121083-0004-SA	SOLID	8080-S		09 SEP 96-IX	09 SEP 96-IA

Quanterra
Environmental Services

LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 121083

Category: 8080-S Pesticides
Matrix: SOLID
QC Run: 09 SEP 96-IX
Concentration Units: ug/kg

Date Analyzed: 13 SEP 96

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
gamma-BHC (Lindane)	33.3	36.1	108	25-166
Heptachlor	33.3	37.5	112	37-132
Aldrin	33.3	36.1	108	40-126
Dieldrin	33.3	36.4	109	50-126
Endrin	33.3	41.6	125	35-126
4,4'-DDT	33.3	35.0	105	42-113

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Semivolatile Organics by GC
Project: 121083

Category: 8080-S Pesticides
Matrix: SOLID
Sample: 121083-0001
MS Run: 09 SEP 96-IA
Units ug/kg Units Qualifier: Wet wt.

Analyte	Sample Result	Concentration MS Result	Concentration MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	RI
gamma-BHC (Lindane)	ND	28.9	30.9	33.3	87	93	6.7	12-164	2
Heptachlor	ND	30.9	33.4	33.3	93	100	7.7	26-131	2
Aldrin	ND	29.8	32.2	33.3	90	97	7.7	28-130	2
Dieldrin	ND	31.9	34.5	33.3	96	103	7.6	38-132	2
Endrin	ND	37.4	40.2	33.3	112	121	7.5	44-135	2
4,4'-DDT	ND	32.7	35.8	33.3	98	107	9.0	20-135	3

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

SINGLE CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 121083

Category: 8080-S Pesticides
Matrix: SOLID
QC Run: 09 SEP 96-IX
Concentration Units: ug/kg

Date Analyzed: 13 SEP 96

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) SCS	Accuracy(%) Limits
2,4,5,6-Tetrachloro-m-xylene	6.67	8.26	124	60-150
Decachlorobiphenyl	6.67	7.66	115	60-150

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

METHOD BLANK REPORT
Semivolatile Organics by GC
Project: 121083

Test: 8080-S
Matrix: SOLID
QC Run: 09 SEP 96-IX

Method 8080 - TCL Organochlorine Pesticides/PCBs

Date Analyzed: 13 SEP 96

Analyte	Result	Units	Reporting Limit
alpha-BHC	ND	ug/kg	1.7
beta-BHC	ND	ug/kg	1.7
delta-BHC	ND	ug/kg	1.7
gamma-BHC (Lindane)	ND	ug/kg	1.7
Aldrin	ND	ug/kg	1.7
Heptachlor	ND	ug/kg	1.7
Heptachlor epoxide	ND	ug/kg	1.7
Endosulfan I	ND	ug/kg	1.7
Dieldrin	ND	ug/kg	3.3
4,4'-DDE	ND	ug/kg	3.3
Endrin	ND	ug/kg	3.3
Endosulfan II	ND	ug/kg	3.3
4,4'-DDD	ND	ug/kg	3.3
Endosulfan sulfate	ND	ug/kg	3.3
4,4'-DDT	ND	ug/kg	3.3
Methoxychlor	ND	ug/kg	14
Endrin aldehyde	ND	ug/kg	3.3
alpha-Chlordane	ND	ug/kg	1.7
gamma-Chlordane	ND	ug/kg	1.7
Toxaphene	ND	ug/kg	70

ND = Not Detected

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

121083

SCS ANALYTICAL LABORATORY

COMPANY NAME: SC[illegible]

ADDRESS: 5111 [illegible] Blvd, 7th Fl, Long Beach CA 90807

PHONE NUMBER: (310) 426 9547

FAX ( ) 427 [illegible]

PROJECT NAME: [illegible]

PROJECT ADDRESS: 0341 E Simms Ave, Pico Rivera, CA

PROJECT NUMBER: 019371 01

SAMPLER NAME AND SIGNATURE: Steve Clements

REPORTS TO BE SENT TO: Ken Lester

CARRIER:

SHIPMENT DATE:

SHIPPING NUMBER:

NUMBER OF SAMPLES: 16

PAGE 1 OF 2

TURNAROUND TIME REQUIRED:
- [X] NORMAL
- [ ] 5-DAY
- [ ] 3-DAY
- [ ] 24-HOUR
- [ ] IMMEDIATE ATTENTION

ANALYSES REQUIRED

LAB ONLY: 5.1

SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	EPA 8080**	Metals*	SAMPLE CONDITION UPON RECEIPT
5701	SB 1(A)	Soil	N/A	6 Glass 3.5	9/1/96							
5702	SB 1(B)								Composite	X	X	
5703	SB 1(C)											
5704	SB 1(D)											
5705	SB 2(A)											
5706	SB 2(B)								composite	X	X	
5707	SB 2(C)											
5708	SB 2(D)											
5709	SB 3(A)											
5710	SB 3(B)								composite	X	X	

SPECIAL INSTRUCTIONS / COMMENTS:

* Metals ⇒ As, Cd, Co, Pb, Hg, Tl, Zn ** No PCB,

Please Archive unused composites for later analysis.

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
COMPANY: SCS	TIME: 11:15	COMPANY: ATS for Quanterra	COMPANY: ATS (for Quanterra)	9/5/96 TIME: 13:15	COMPANY: Quanterra

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

121083

SCS ANALYTICAL LABORATORY

COMPANY NAME: SCS Engineers
ADDRESS: 3711 Long Beach Blvd 9th Fl Long Beach CA 90807
PHONE NUMBER: (310) 426 9544
FAX (310) 427 ...
PROJECT NAME: LADWP
PROJECT ADDRESS: 5771 E ... Ave Pico Rivera, CA
PROJECT NUMBER: ...
SAMPLER NAME AND SIGNATURE: Steve Clements [signature]
REPORTS TO BE SENT TO: Ken Lister

CARRIER:
SHIPMENT DATE:
SHIPPING NUMBER:
NUMBER OF SAMPLES: 16
PAGE 2 OF 2

TURNAROUND TIME REQUIRED:
- [x] NORMAL
- [ ] 5-DAY
- [ ] 3-DAY
- [ ] 24-HOUR
- [ ] IMMEDIATE ATTENTION

ANALYSES REQUIRED: EPA 8080 **, Metals *

LAB ONLY — SAMPLE CONDITION UPON RECEIPT: 5.1

SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	EPA 8080 **	Metals *
3711	SB-3(C)	Soil	N/A	3 x 2 Glass Jar	9/1/96	Composite w/ SB-3(A) 4(B) on Page No 1					
3712	SB 3(D)	↓	↓	↓	↓						
3713	SB 4(A)	↓	↓	↓	↓	Composite				X	X
3714	SB 4(B)	↓	↓	↓	↓						
3715	SB 4(C)	↓	↓	↓	↓						
3716	SB 4(D)	↓	↓	↓	↓						

SPECIAL INSTRUCTIONS / COMMENTS:
~~[scribbled]~~ * Metals => see Page No 1. ** No PCBs
Please archive crossed composites for later analysis.

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)
[signature]	9/5/96	[signature]	[signature]	9/5/96	[signature]
COMPANY: SCS	TIME: 11:15	COMPANY: ATD for Quanterra	COMPANY: ATD (for Quanterra)	TIME: 13:15	COMPANY: Quanterra

TRUESDAIL LABORATORIES, INC.

CHEMISTS · MICROBIOLOGISTS · ENGINEERS
RESEARCH · DEVELOPMENT · TESTING
ESTABLISHED 1931

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780
(714) 730-6239
FAX (714) 730-6462

LA County Dept. of Agricultural Commissioners
3400 La Madera Ave.
El Monte, CA 91732
Attn: Richard Wightman

Date: December 9, 1996
Recv'd: November 14, 1996
Lab. No: 96224
P.O. No: Verbal

Sample: Four (4) soil samples labelled:

Composite		
9492	SB-1(A)-2	11/8/96
9493	SB-1(B)-2	11/8/96
9494	SB-1(C)-2	11/8/96
9495	SB-1(D)-2	11/8/96

Investigation: Analyze for strychnine in soil by high performance liquid chromatography (HPLC)-ultra violet (UV) spectroscopic detection.

RESULTS

The results are tabulated on the following page.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Joe Bramblett, Manager
Instrumental Methods

Approximately, seven (7) grams of each soil sample was composited to yield approximately 21 grams.

The soil sample composite was extracted with distilled water at pH < 2. The water extract was neutralized to pH 5 and analyzed by HPLC-UV. The HPLC-UV analysis was adapted from NIOSH Method 5016.

Milligrams per Kilogram (ppm)

HPLC-UV	Strychnine	Detection Limit*
Composite	7.3	0.1
Composite, duplicate	4.8	0.1

*-The individual samples have a detection limit of approximately 0.4 mg/kg (ppm).

Laboratory Control Spike

Milligrams per Kilogram (ppm)

HPLC-UV	Amount Spiked	Amount Found	Percent Recovered
Strychnine	6.74	4.51	66.9

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS Engineers	CARRIER:	TURNAROUND TIME REQUIRED: ☒ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION
ADDRESS: 3711 Long Beach Blvd, 7th Fl. Long Beach, CA 90807	SHIPMENT DATE:	
PHONE NUMBER: (310) 426-9544	SHIPPING NUMBER:	
FAX: (310) 427-0505	NUMBER OF SAMPLES: 4	PAGE 1 OF 1
PROJECT NAME: LACDAC		
PROJECT ADDRESS: 5541 E. Slauson Ave, Pico Rivera, CA		
PROJECT NUMBER: 01731101		
SAMPLER NAME AND SIGNATURE: Steve Clements		
REPORTS TO BE SENT TO: Ken Lister		

SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: Strychnine	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
4492	SB-1(1)-2	Soil		8 oz Glass Jar	11/5/96						
4493	SB-1(B)-2	Soil		Jar					Composite	X	
4494	SB-1(C)-2										
4495	SB-1(D)-2										

SPECIAL INSTRUCTIONS / COMMENTS: Note: Please archive unused composite for later analysis.

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
COMPANY: SCS	TIME: 10:30am	COMPANY: T.I.I.	COMPANY:	TIME:	COMPANY:

Quanterra Incorporated
1721 South Grand Avenue
Santa Ana, California 92705

714 258-8610 Telephone
714 258-0921 Fax

Quanterra
Environmental Services

December 9, 1996

SCS ENGINEERS
3711 LONG BEACH BLVD, NINTH FLOOR
LONG BEACH, CA 90807
ATTN: MR. STEVE CLEMENTS

LIMS NO.: 122821-0001/0005
DATE SAMPLED: 8-NOV-1996
DATE SAMPLE REC'D: 12-NOV-1996
PROJECT: LACDAC/0193171.01

Enclosed with this letter is the report containing the analytical results for the project specified above.

The Narrative section included in the following attachment provides a detailed description of all events that occurred during sample processing, analysis, and data review as applicable to the samples and analytical methods requested.

Report data sheets contain a list of the requested constituents measured in each test, the analytical results, and the standard reporting limits (RLs). Reporting limits are adjusted to reflect any dilution or dry weight correction, when applicable. Solid and waste matrix samples are reported on an "as received" basis for this report. Also provided in this report are the LIMS Report Key and the terms and abbreviations commonly used in our reports.

Preliminary data were provided on December 9, 1996 at 4:25 P.M. to Steve Clements.

The report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding the data provided in this report, please call Sabina Sudoko at (714) 258-8610. Release of this report has been authorized by the Lab Director or the designee as demonstrated by the following signature.

Sincerely,

Sabina R. Sudoko
Project Manager

cc: Project File

Section	Description
Cover letter	Signature page, report narrative as applicable.
Sample Description Information	Tabulated cross-reference between the Lab ID and Client ID, including matrix, date and time sampled and the date received for all samples in the project.
Sample Analysis Results Sheets	Lists sample results, test components, reporting limits, dates prepared and analyzed and any data qualifiers. Pages are organized by test.
QC Lot Assignment Report	Cross-reference between lab IDs and applicable QC batches (DCS, LCS, SCS, Blank, MS/SD, DU)
Duplicate Control Sample Report	Percent recovery and RPD results, with acceptance limits, for the laboratory Duplicate Control Samples for each test are tabulated in this report. These are measures of accuracy and precision for each test.
Laboratory Control Sample Report	Percent recovery results for a single Laboratory Control Sample (if applicable) are tabulated in this report, with the applicable acceptance limits for each test.
Matrix Spike/Matrix Spike Duplicate Report	Percent recovery and RPD results for matrix-specific QC samples and acceptance limits, where applicable. This report can be used to assess matrix effects on an analysis.
Single Control Sample Report	A tabulation of the surrogate recoveries for the blank for organic analyses.
Method Blank Report	A summary of the results of the analysis of the method blank for each test.

List of Abbreviations and Terms

DCS	Duplicate Control Sample	MSD	Matrix Spike Duplicate
DU	Sample Duplicate	QC Run	Preparation batch
EB	Equipment Blank	QC Category	LIMS QC Category
FB	Field Blank	QC Lot	DCS batch
FD	Field Duplicate	ND	Not Detected at the reporting limit expressed
IDL	Instrument Detection Limit	QC Matrix	Matrix of the laboratory control sample (s)
LCS	Laboratory Control Sample	RL	Reporting Limit
MB	Method Blank	QC	Quality Control
MDL	Method Detection Limit	SA	Sample
MS	Matrix Spike	SD	See MSD
RPD	Relative Percent Difference	TB	Trip Blank
ppm (parts-per-million)	mg/L or mg/kg	ppb (parts-per-billion)	µg/L or µg/kg
QUAL	Qualifier flag	DIL	Dilution Factor

Refer to the Quanterra Incorporated Quality Assurance Management Plan for detailed explanations of terms summarized above.

TABLE OF CONTENTS

LIMS # 122821

CASE NARRATIVE

LIMS # 122821

I. CONDITION UPON RECEIPT

Cooler was received intact. The temperature of the cooler was 5.6°C.

Sample containers were received intact. Proper preservation of applicable samples (excluding VOA samples) was verified upon receipt and documented on the Sample Control worksheet. Sample container label did agree with the COC as to sample ID, collection date/time, requested tests and/or preservatives.

Samples were received in time to meet the method holding time specifications.

II. ORGANIC ANALYSES (BY METHOD: SW8080)

HOLDING TIME
All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK
All method blanks met method-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs
All spike recovery and RPD data met method-specific QC criteria.

SURROGATE RECOVERIES
The recovery of SW8080 surrogate decachlorobiphenyl in sample 122821-0005 is outside acceptance limits. Since the other SW8080 surrogate is in control and the method only requires one surrogate to be in control, no corrective action was required.

CALIBRATIONS
All calibrations and calibration verifications met method-specific QC criteria.

III. METALS (BY METHOD: SW6010A; SW7000 Series)

HOLDING TIME
All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK
All method blank data met method-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs
All spike recovery and RPD data met method-specific QC criteria.

CALIBRATIONS
All calibrations and calibration verifications met method-specific QC criteria.

Quanterra
Environmental Services

SAMPLE DESCRIPTION INFORMATION
for
SCS Engineers

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
122821-0001-SA	9496 SB-1(A)2		08 NOV 96		12 NOV 96
122821-0002-SA	9497 SB-1(B)2		08 NOV 96		12 NOV 96
122821-0003-SA	9498 SB-1(C)2		08 NOV 96		12 NOV 96
122821-0004-SA	9499 SB-1(D)2		08 NOV 96		12 NOV 96
122821-0005-SA	COMPOSITE OF 9496/9499	SOIL	08 NOV 96		12 NOV 96

Quanterra Environmental Services

Organochlorine Pesticides and Polychlorinated Biphenyls
Method 8080

Client Name:	SCS Engineers		
Client ID:	COMPOSITE OF 9496/9499		
LAB ID:	122821-0005-SA		
Matrix:	SOIL	Sampled: 08 NOV 96	Received: 12 NOV 96
Authorized:	12 NOV 96	Prepared: 13 NOV 96	Analyzed: 19 NOV 96
Instrument:	GC/ECD-PTB	Dilution: 1.0	

Parameter	Result	Qualifier	RL	Units
alpha-BHC	ND		1.7	ug/kg
beta-BHC	ND		1.7	ug/kg
delta-BHC	ND		1.7	ug/kg
gamma-BHC (Lindane)	ND		1.7	ug/kg
Aldrin	ND		1.7	ug/kg
Heptachlor	ND		1.7	ug/kg
Heptachlor epoxide	ND		1.7	ug/kg
Endosulfan I	ND		1.7	ug/kg
Dieldrin	ND		3.3	ug/kg
4,4'-DDE	18		3.3	ug/kg
Endrin	ND		3.3	ug/kg
Endosulfan II	ND		3.3	ug/kg
4,4'-DDD	41		3.3	ug/kg
Endosulfan sulfate	ND		3.3	ug/kg
4,4'-DDT	ND		3.3	ug/kg
Methoxychlor	ND		14	ug/kg
Endrin aldehyde	ND		3.3	ug/kg
alpha-Chlordane	17		1.7	ug/kg
gamma-Chlordane	13		1.7	ug/kg
Toxaphene	ND		70	ug/kg

Surrogate	Recovery		Acceptable Range	
2,4,5,6-Tetrachloro-m-xylene	143	%	60 - 150	
Decachlorobiphenyl	211	%	60 - 150	I

I = Surrogate recovery outside of limits due to sample matrix interference.
ND = Not Detected

Quanterra
Environmental Services

METALS

Client Name: SCS Engineers
Client ID: COMPOSITE OF 9496/9499
LAB ID: 122821-0005-SA
Matrix: SOIL
Authorized: 12 NOV 96

Sampled: 08 NOV 96
Prepared: See Below

Received: 12 NOV 9
Analyzed: See Belo

Parameter	Result	Qual	DIL	RL	Units	Method	Prep Date	Analyzed Date
Mercury	0.20		1.0	0.040	mg/kg	SW7471	18 NOV 96	19 NOV
Arsenic	51.1		1.0	10.0	mg/kg	6010A	14 NOV 96	17 NOV
Cadmium	0.72		1.0	0.50	mg/kg	6010A	14 NOV 96	17 NOV
Copper	27.3		1.0	2.0	mg/kg	6010A	14 NOV 96	17 NOV
Lead	51.3		1.0	10.0	mg/kg	6010A	14 NOV 96	17 NOV
Thallium	118		1.0	50.0	mg/kg	6010A	14 NOV 96	17 NOV
Zinc	290		1.0	2.0	mg/kg	6010A	14 NOV 96	17 NOV

Quanterra
Environmental Services

QC LOT ASSIGNMENT REPORT - MS QC
Semivolatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Number (SA,MS,SD,DU)
122821-0005-SA	SOLID	8080-S		13 NOV 96-C2X	13 NOV 96-CA

Quanterra
Environmental Services

LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 122821

Category: 8080-S Pesticides
Matrix: SOLID
QC Run: 13 NOV 96-C2X
Concentration Units: ug/kg

Date Analyzed: 14 NOV 96

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
gamma-BHC (Lindane)	33.3	24.4	73	25-166
Heptachlor	33.3	25.0	75	37-132
Aldrin	33.3	26.1	78	40-126
Dieldrin	33.3	26.0	78	50-126
Endrin	33.3	28.8	86	35-126
4,4'-DDT	33.3	26.3	79	42-113

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Semivolatile Organics by GC
Project: 122821

Category: 8080-S Pesticides
Matrix: SOLID
Sample: 122827-0001
MS Run: 13 NOV 96-CA
Units ug/kg Units Qualifier: Wet weight

Analyte	Concentration Sample Result	MS Result	MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	Acceptance Limit RPI
gamma-BHC (Lindane)	ND	25.1	25.0	33.3	75	75	0.4	12-164	27
Heptachlor	ND	25.8	25.7	33.3	78	77	0.3	26-131	20
Aldrin	ND	27.1	26.8	33.3	81	80	1.4	28-130	20
Dieldrin	ND	26.0	26.2	33.3	78	79	0.4	38-132	28
Endrin	ND	30.2	30.5	33.3	91	91	0.8	44-135	29
4,4'-DDT	ND	27.3	27.5	33.3	82	83	0.7	20-135	38

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

SINGLE CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 122821

Category: 8080-S Pesticides
Matrix: SOLID
QC Run: 13 NOV 96-C2X
Concentration Units: ug/kg

Date Analyzed: 14 NOV 96

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) SCS	Accuracy(%) Limits
2,4,5,6-Tetrachloro-m-xylene	6.67	6.12	92	60-150
Decachlorobiphenyl	6.67	7.49	112	60-150

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

METHOD BLANK REPORT
Semivolatile Organics by GC
Project: 122821

Test: 8080-S
Matrix: SOLID
QC Run: 13 NOV 96-C2X

Method 8080 - TCL Organochlorine Pesticides/PCBs

Date Analyzed: 14 NOV 96

Analyte	Result	Units	Reporting Limit
alpha-BHC	ND	ug/kg	1.7
beta-BHC	ND	ug/kg	1.7
delta-BHC	ND	ug/kg	1.7
gamma-BHC (Lindane)	ND	ug/kg	1.7
Aldrin	ND	ug/kg	1.7
Heptachlor	ND	ug/kg	1.7
Heptachlor epoxide	ND	ug/kg	1.7
Endosulfan I	ND	ug/kg	1.7
Dieldrin	ND	ug/kg	3.3
4,4'-DDE	ND	ug/kg	3.3
Endrin	ND	ug/kg	3.3
Endosulfan II	ND	ug/kg	3.3
4,4'-DDD	ND	ug/kg	3.3
Endosulfan sulfate	ND	ug/kg	3.3
4,4'-DDT	ND	ug/kg	3.3
Methoxychlor	ND	ug/kg	14
Endrin aldehyde	ND	ug/kg	3.3
alpha-Chlordane	ND	ug/kg	1.7
gamma-Chlordane	ND	ug/kg	1.7
Toxaphene	ND	ug/kg	70

ND = Not Detected

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QC LOT ASSIGNMENT REPORT - MS QC
Metals Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Numbe (SA,MS,SD,DU)
122821-0005-SA	SOLID	HG-CVAA-S		18 NOV 96-TX	18 NOV 96-TA
122821-0005-SA	SOLID	ICP-S		14 NOV 96-BX3	14 NOV 96-BB

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LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation
Project: 122821

Category: HG-CVAA-S Mercury by CVAA
Matrix: SOLID
Date Analyzed: 19 NOV 96
QC Run: 18 NOV 96-TX
Concentration Units: mg/kg

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
Mercury	0.833	0.812	97	80-120

Category: ICP-S ICP Metals
Matrix: SOLID
Date Analyzed: 17 NOV 96
QC Run: 14 NOV 96-BX3
Concentration Units: mg/kg

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) LCS	Accuracy(%) Limits
Arsenic	200	191	96	75-110
Cadmium	5.00	4.30	86	80-115
Copper	25.0	23.3	93	85-115
Lead	50.0	45.8	92	80-110
Thallium	200	189	94	80-110
Zinc	50.0	46.4	93	80-115

Calculations are performed before rounding to avoid round-off errors in calculated res[illegible]s

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Environmental Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Metals Analysis and Preparation
Project: 122821

Category: HG-CVAA-S Mercury by CVAA
Matrix: SOLID
Sample: 122821-0005
MS Run: 18 NOV 96-TA
Units mg/kg Units Qualifier: Wet wt.

Analyte	Concentration Sample Result	MS Result	MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	RI
Mercury	0.195	0.360	0.405 n	0.167	99	126	12	80-120	2

Category: ICP-S ICP Metals
Matrix: SOLID
Sample: 122633-0008
MS Run: 14 NOV 96-BB
Units mg/kg Units Qualifier: Wet weight

Analyte	Concentration Sample Result	MS Result	MSD Result	Amount Spiked MS/MSD	%Recovery MS	%Recovery MSD	%RPD	Acceptance Limit Recov.	RP
Arsenic	3.70 J	182	184	200	89	90	1.4	75-110	2
Cadmium	1.94	6.84	7.66	5.00	98	114	11	80-115	2
Copper	228	277 n	312 n	25.0	NC	NC	NC	85-115	2
Lead	269	292 n	407 n	50.0	NC	NC	NC	80-110	2
Thallium	ND	181	181	200	90	90	0.0	80-110	2
Zinc	691	749 n	948 n	50.0	NC	NC	NC	80-115	2

J = Result is detected below the reporting limit or is an estimated concentration.
n = Spiked analyte out of matrix spike acceptance limits; refer to lab control sample results.
NC = Not Calculated, calculation not applicable.
ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra
Environmental Services

METHOD BLANK REPORT
Metals Analysis and Preparation
Project: 122821

Test: HG-CVAA-S Method 7471 - Mercury, Cold Vapor AA
Matrix: SOLID
QC Run: 18 NOV 96-TX Date Analyzed: 19 NOV 96

Analyte	Result	Units	Reporting Limit
Mercury	ND	mg/kg	0.040

Test: ICP-S Method 6010 - ICP Metals (Total)
Matrix: SOLID
QC Run: 14 NOV 96-BX3 Date Analyzed: 17 NOV 96

Analyte	Result	Units	Reporting Limit
Arsenic	ND	mg/kg	10.0
Cadmium	ND	mg/kg	0.50
Copper	ND	mg/kg	2.0
Lead	ND	mg/kg	10.0
Thallium	ND	mg/kg	50.0
Zinc	ND	mg/kg	2.0

ND = Not Detected

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS Engineers
ADDRESS: 5711 Long Beach Blvd, 9th Fl, Long Beach, CA, 90805
PHONE NUMBER: (310) 426-9544
FAX: (310) 427-0565
PROJECT NAME: LACDAC
PROJECT ADDRESS: 8811 East Slauson Ave, Pico Rivera CA
PROJECT NUMBER: 01931.7.01
SAMPLER NAME AND SIGNATURE: Steve Clements
REPORTS TO BE SENT TO: Ken Luster

CARRIER:
SHIPMENT DATE:
SHIPPING NUMBER:
NUMBER OF SAMPLES: 4
PAGE 1 OF 1

TURNAROUND TIME REQUIRED:
- [x] NORMAL
- [ ] 5-DAY
- [ ] 3-DAY
- [ ] 24-HOUR
- [ ] IMMEDIATE ATTENTION

SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: EPA 8082**	ANALYSES REQUIRED: Metals*	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
9496	SB 1(A)2	Soil & Sludge		Brass Liners	11/8/96				Composite	X	X	
9497	SB 1(B)2											
9498	SB 1(C)2											
9499	SB 1(D)2											

SPECIAL INSTRUCTIONS / COMMENTS:
** No PCBs
* Metals ⇒ As, Cd, Cr, Pb, Hg, Tl, Zn
Note: Please Archive Unused composite for later analysis

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
COMPANY: SCS	TIME: 11/12/96 10:00am	COMPANY: Quanterra	COMPANY: Quanterra	11/12/96 TIME: 1045	COMPANY: Quanterra